

2003

## Testimony in Support of the Congaree National Park Act of 2003

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**BOUNDARIES OF FORT DONELSON BATTLEFIELD; ESTABLISH  
THE CONGAREE SWAMP NATIONAL PARK; HARRY S.  
TRUMAN STATUE; AND BOUNDARIES OF HARPERS FERRY  
NATIONAL PARK**

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**HEARING**  
BEFORE THE  
SUBCOMMITTEE ON NATIONAL PARKS  
OF THE  
COMMITTEE ON  
ENERGY AND NATURAL RESOURCES  
UNITED STATES SENATE  
ONE HUNDRED EIGHTH CONGRESS

FIRST SESSION

ON

**S. 524                      S. 1472**  
**S. 1313                      S. 1576**

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esting newspaper reports about 1852 flood damage to railroad structures crossing the Congaree River and floodplain.

The Confederacy utilized this railroad during the Civil War. The second-largest Confederate troop movement by rail during the Civil War utilized this railroad, when Longstreet's First Corps moved from Virginia to north Georgia, arriving at the time of the Battle of Chickamauga. Records also describe destruction of railroad property (including the Congaree River bridge and Congaree floodplain trestles) and structures in the village of Kingville as the Union Army approached and departed Columbia.

Thank you for considering our statement in support of S. 1313, the Congaree National Park Act of 2003. Please contact us if additional information will be helpful.

Sincerely,

ANGELA VINEY, *Executive Director*,  
South Carolina Wildlife Federation.

LABRUCE ALEXANDER, *President*,  
Friends of Congaree Swamp.

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STATEMENT OF DR. WILLIAM L. GRAF, EDUCATIONAL FOUNDATION UNIVERSITY  
PROFESSOR AND PROFESSOR OF GEOGRAPHY, UNIVERSITY OF SOUTH CAROLINA

The purpose of this testimony is to support the passage of the Congaree National Park Act of 2003 by pointing out the geographic, scientific, and historic significance of the park from the standpoint of a practicing researcher. My views derive from more than 30 years experience as a researcher, teacher, and public servant specializing in the environmental sciences and policy for public land and water. My experience is national and international in scope, and includes many public land and water areas throughout the United States. The following testimony addresses the national geographic importance of the Congaree, its scientific significance, and its historical importance, with a concluding comment about the name of the unit.

*Geographic Importance*

The high degree of protection and support offered by national park status for the Congaree is important from the following national geographic perspectives:

1. The park represents the only extensive tract of eastern, flood plain, hardwood, old growth deciduous forest in the nation, so that it adds to the diversity and representativeness of the park system from a national perspective. The long-term effectiveness of the national park system in achieving its goal of preservation of resources for the enjoyment of present and future generations depends on the inclusion of features that represent the diversity of geologic, hydrologic, and biologic systems across the entire country. Because of the history of economic development and the disposition of federal public lands, the park system includes substantial representation of western ecosystems, but it is less complete with respect to eastern ecosystems. When the United States became a nation, there were more than 24,000,000 acres of eastern, flood plain, old growth, deciduous forest. Only small remnants of a few hundred to a few thousand acres now remain. The Congaree's 11,000 acres is the largest remnant of this east coast ecosystem, and is as much a part of our heritage as the redwood forests in the park system on the west coast.

2. The park's location in the eastern United States is important because in terms of area the national park system is heavily weighted toward western areas: eastern additions contribute to regional balance. In terms of total acreage, relatively large western parks dominate the national park system. Yet, the natural, non-urban ecosystems of the eastern United States are of equal historic and scientific importance, and they are located close to many of the nation's largest population centers and large numbers of potential users. The opportunity for public scientific and historical education is greatly enhanced if the park system includes sizeable eastern units, and the Congaree offers a unique opportunity in its addition to the system. In a part of the nation where public lands are a small percentage of the total surface area, the Congaree is relatively large.

3. The size of the park protects the resource. National parks for environmental resources are often relatively large, but absolute size is much less important than the relationship between the geographic areas of the park and the resource it is designed to protect. By this yardstick, the Congaree (with its proposed 4,500 acre addition) is at the optimal size. Of the 13,000 acres of old growth forest now in the entire state of South Carolina, 11,000 acres are in the park.

4. The park's 15,000 acres of wilderness are especially important from a national perspective because of the relative scarcity of wilderness in the eastern United States. Although national park space is weighted toward the western half of the na-

tion, wilderness space is even more heavily weighted to the west. Of the nation's 105.5 million wilderness acres, 54% is in Alaska, and 90% is in the western portion of the country. The 15,000 acre wilderness component of Congaree is one of the largest truly wild areas in the southeast, and my personal experience indicates that it is truly wild, pristine, and unique with respect to the existing wilderness system.

#### *Scientific Significance*

National park status for the Congaree is exceptionally important from the scientific standpoint for the following reasons:

1. The old growth, flood plain, deciduous forest is a world-class research and education resource. Ecosystem science depends for its understanding of environmental dynamics on investigations of areas that have not been significantly affected by human activities. Although the understanding of human effects is necessary for good management, fundamental analysis requires areas that are as natural as possible. These undisturbed areas are especially difficult to find on flood plains (where economic development is focused), and undisturbed, old growth forests are additionally rare. The park has some of the tallest trees in the eastern United States with the highest forest canopy of its type in the world. The Congaree represents a globally significant scientific laboratory that is unequaled for its ecosystem type, a fact recognized by its status as an International Biosphere Reserve. Annually, researchers from the United States and other continents use the Congaree as a platform for their research, and their published scientific results lead to better management of this and other forests.

2. The forest is a benchmark system and a barometer of ecosystem responses to global climate, changes. Of special scientific importance is the fact that most of the Congaree is old growth forest, never having been harvested. The Congaree therefore represents eastern hardwood forests on flood plains as they were before technological intervention, and it represents a standard ecological yardstick by which change in other areas can be measured. When we attempt to restore other systems to more natural conditions, the Congaree provides a model toward which we can work. When decision makers and the public require an understanding of what the goals of forest restoration are, we have an accessible example in the public lands of the Congaree. This forest also can be used as a measuring device for assessing the effects of global climate change. Often, the effects of such changes are hard to gauge in ecosystems where other human influences are overwhelming, such as in managed forests. Because the Congaree is in its original, natural state, it records and responds to global adjustments and serves as a sort of "miner's canary" for forest health throughout the eastern United States.

3. The river is a benchmark system for river restoration. The forest of the Congaree is the unit's most obvious environmental resource, but the Congaree River which forms the southern border of the park, is of equal importance for science. Although there are a few sizeable dams many miles upstream from the park, the flow of the river is close to its natural condition in the vicinity of the Congaree, with large fluctuations on monthly and annual time scales. As a result, the aquatic habitats and the landforms of the river are nearly natural, something that is exceptionally rare in the United States, where most rivers are dammed and artificially controlled. The Clean Water Act mandates that it is national policy to restore and maintain our nation's water courses, but there are few models to follow when we try to modify dam operations and other control mechanisms to simulate more natural conditions. The Congaree River in the vicinity of the park provides one of the very few examples that can be used as a benchmark by researchers, managers, and decision-makers dealing with the restoration of large eastern American rivers.

4. The diversity of the system makes it an indispensable wildlife habitat area. There are more than 700 species of plants in the Congaree, a remarkably diverse basic ecosystem that permits a wide range of wildlife to flourish. Because diversity of animal species depends on diversity of plants for survival, the Congaree is particularly important from the perspective of biodiversity. There are no other tracts of similar size, public or private, in the Piedmont and coastal plain that are as diverse as the Congaree. This characteristic makes the park a significant gene pool and life assemblage very different from the managed landscapes that surround it. We do not yet know the extent or ultimate value of this diversity, but we do know that biodiversity is becoming an increasingly rare geographic asset in most parts of the world. As a result, while development in many parts of the world destroys forests, the Congaree becomes increasingly important for research.

#### *Historical Significance*

National park status for the Congaree is important because the area is of surprising historical significance for the following reasons:

1. The ancient history of the area is reflected in archaeological evidence. More than 10,000 years ago, ancient societies used the Congaree area for life and sustenance. Some of the remains of their activities are found in the general region, including the park area. However, an extensive inventory and assessment of these sites has not yet been done for the park. Substantial amounts of future exploration and research remain in the area, with the results likely to shed significant understanding on the lives and livelihoods of these ancient peoples. Protection of these as yet unstudied sites is essential if we are to learn about them from professional investigations.

2. The area of the proposed park includes a critical gateway for colonial expansion from coastal areas into the interior of the southern Piedmont. The 4,500-acre proposed expansion of the existing national monument is absolutely critical because it would result in the inclusion of the area at the confluence of the Wateree and Congaree rivers. This area was a funnel for the first extensions of colonial settlement upward from the coast and into what is now central South Carolina during the early 1700s. As an early representative of colonial expansion from coast to Piedmont that was occurring all along the east coast, this area was the site of two essential ferry crossings, Huger's Ferry (in the present national monument) and McCord's Ferry (in the extension area). The creation of these ferry crossings, establishment of trading posts at the confluence of the two rivers, and conversion of Native American trails to primitive roads radiating northward and westward from this confluence were critical components of the early history of this part of the nation. Preservation of these sites and development of interpretive mechanisms in a national park will provide much needed educational opportunities related to the American story, informing visitors about the earliest westward expansions.

3. The area includes archaeological sites related to early European settlement. From records we know that the general Congaree area was one of the first major grazing areas of what became the United States. In the late 1600s, long before the better known "wild west" of more recent times, cowboys grazed their herds in the vicinity of the Congaree. During the colonial period, graziers constructed mounds for their cattle to use during flooding periods. The Congaree still contains examples of ring dikes, mounds, and levees constructed by some of the nation's first cowboys. Additional research into these features and their associated lifestyles and economy is likely to produce important educational opportunities not available in any other location.

#### *The Name "Congaree National Park"*

Congaree National Park is an appropriate name for this unit of the park system for three important reasons:

1. The present label of "Congaree Swamp" is a misnomer. Congaree Swamp National Monument is a misapplication of the term "swamp." "Swamp" is a geographical term applied to areas of low, waterlogged ground, often characterized by bog or marsh vegetation. The area of this park unit is not a swamp, but rather it is a flood plain, periodically overflowed by river waters. Its vegetation is flood plain forest rather than swamp marsh grasses. For this reason, the national park name should not include the term "swamp."

2. "Congaree" is the name of the occupants of this area before the arrival of Anglo-Americans. The Native American tribe that occupied the area of the park called itself the Congaree, and the memorialization of their occupancy here is appropriate. The Congaree tribe, like most tribes in the coastal Southeast, was small in number. Within a few years of their contact with Anglo-Americans, they were decimated by disease, and survivors scattered to join other nearby tribes.

3. From colonial times, Anglo-Americans referred to the area that includes the park as "the Congaree." From about 1700 onward, the area of land between the Wateree and Congaree rivers was known as "the Congaree." The label appears in newspapers and books until the formation of present-day Richland County shortly before 1800, though "the Congaree" continued in colloquial use for many years. As a label for the national park, Congaree (without the additional term "swamp") has historical significance.

In summary, national park status is strongly justified for an expanded version of the existing Congaree Swamp National Monument because of the potential role of the unit in the nation-wide system of parks. The Congaree is a place of substantial scientific significance and historical importance, and its preservation and management as a national park will benefit present and future generations of Americans as well as providing protection for a resource of national and international significance.

UNIVERSITY OF SOUTH CAROLINA,  
COLUMBIA, SC, AUGUST 4, 2003.

Senator FRITZ HOLLINGS,  
*Russell Office Building, Washington, DC.*

DEAR SENATOR HOLLINGS: The purpose of this letter is to offer support in the form of formal testimony commenting on the scientific importance of your Congaree National Park Act of 2003. My comments stem from my experience of more than 30 years as a specialist in environmental sciences and policy for public land and water. Below, I address the national geographic and scientific importance of the Congaree. I close with a brief comment on the appropriate name for the park, a portion of which is now known as Congaree Swamp National Monument.

*National Geographic Significance*

Congaree National Park would be an indispensable component of the park system, because it would be the only extensive representative in the national system of an eastern, temperate, flood plain, hardwood forest. A reasonable goal of the park system is to include a wide range of representative ecosystems, so that the inclusion of this example is a foregone conclusion. There are no other examples of this ecosystem in tracts this large available for preservation. Of equal importance, however, is the opportunity to protect the Congaree's 15,000 acres of wilderness. Wilderness tracts of any extent are exceptionally rare in the eastern portion of the United States, making this area a vital part of a balanced national system with fair representation for the East. I have examined the wilderness area of the Congaree, and I find that it is pristine and unique.

*Scientific Significance*

The Congaree is scientifically significant from at least three standpoints: the forest ecosystem, the Congaree River, and wildlife in the area. As part of the International Biosphere Reserve system, the Congaree is a world-class ecology laboratory, and as such, it is critical to global research on ecosystem dynamics. The Congaree forest is a remnant of a forest type that once covered huge areas of the eastern United States, and it offers public visitors and scientific researchers the only existing opportunity to see and investigate some of the tallest trees in the eastern part of the nation and one of the highest forest canopies in the world. The Congaree River on the southern edge of the park largely functions as a natural stream (despite some dams located many miles upstream from the park). The significance of this nearly natural behavior is that the stream is one of the few rivers in the East that can be used as a benchmark to guide river restoration and maintenance efforts mandated by the Clean Water Act. Finally, the more than 170 bird species sighted over the past decade in the Congaree include the endangered red-cockaded woodpecker. The biodiversity of the park, extending from the 700 plant species to remarkably diverse wildlife make the area pivotal as a location for scientific investigations into the complex connections among land, water, and life that are obscured elsewhere by agricultural and urban land uses.

*The Name "Congaree National Park"*

Your bill proposes the name "Congaree National Park," and I urge you to retain this name, avoiding the use of the term "Congaree Swamp." The area is not a swamp, scientifically defined as a constantly wet area with standing water and bog or marsh vegetation. The Congaree, on the other hand, is a flood plain, periodically inundated by flowing water, with a majestic hardwood forest.

Sincerely,

WILLIAM L. GRAF,  
*Educational Foundation University*  
*Professor*  
*and Professor of Geography.*